Worksheet Determination of NEPA Adequacy (DNA)

U.S. Department of the Interior Bureau of Land Management (BLM)

OFFICE: Battle Mountain District (Tonopah Field Office)

TRACKING NUMBER: DOI-BLM-NV-B020-2017-0039-DNA

PROPOSED ACTION TITLE/TYPE: October 24, 2017 Competitive Geothermal Lease Sale

LOCATION/LEGAL DESCRIPTION: See Attachment A

GEOTHERMAL LEASE SALE STIPULATIONS: See Attachment B

A. Description of the Proposed Action and any applicable mitigation measures

A competitive geothermal lease sale of certain public land within the Battle Mountain District, Tonopah Resource Management Planning Area by the U.S. Department of the Interior, Bureau of Land Management, Nevada State Office, pursuant to 43 CFR 3200.

B. Land Use Plan (LUP) Conformance

LUP Name: Tonopah Resource Management Plan (RMP) and Record of Decision Date Approved: October 2, 1997

The proposed action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following RMP decisions (objectives, terms, and conditions):

Fluid Minerals Objective: "To provide opportunities for exploration and development of fluid minerals such as oil, gas, and geothermal resources, using appropriate stipulations to allow for the preservation and enhancement of fragile and unique resources" (p. 22).

The proposed BLM-administered lease parcels are among lands that the RMP designated as open to fluid mineral leasing (Fluid Minerals RMP Determinations, p. 22-23 and Maps 34-35).

Environmental Impact Statement and Record of Decision for Geothermal Leasing in the Western US (Geothermal PEIS/ROD)_ Date Approved: December 17, 2008

This decision specifically amends LUPs including the Tonopah RMP (Geothermal ROD Appendix A, Table A-1, page A-4) to:

• "Identify public lands that are administratively and legally closed or open to leasing, and under what conditions.

• "Develop a comprehensive list of stipulations, BMPs, and procedures to serve as consistent guidance for future geothermal leasing and development on public and NFS lands" (Geothermal ROD Chapter 2.1, page 2-1).

"This ROD incorporates the programmatic analysis of the PEIS and amends BLM land use plans. As such, it allows the BLM to make future decisions on whether or not to issue geothermal leases in conformance with the amended land use plan on the basis of the analysis in the PEIS. It is the intent of the BLM that, upon receipt of future nominations or applications for leases, affected BLM offices would be able to conduct a Documentation of Land Use Plan Conformance and NEPA Adequacy (DNA) evaluation to make lease sale decisions without further plan amendments or NEPA analysis, unless new information or special circumstances require additional environmental evaluation" (Scope of Analysis and Decisions, Geothermal ROD page 1-5).

Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (GRSG Plan Amendment) Date Approved: September 2015

This decision specifically amends LUPs including the Tonopah RMP (GRSG Plan Amendment, Chapter 1.1, page 1-6) "to identify and incorporate appropriate measures in existing land use plans. It is intended to conserve, enhance, and restore GRSG habitat by avoiding, minimizing, or compensating for unavoidable impacts on GRSG habitat in the context of the BLM's multiple use and sustained yield mission under FLPMA" (GRSG Plan Amendment Chapter 1.2, Purpose and Need, page 1-8). Appendix G of the GRSG Plan Amendment provides stipulations specific to geothermal leasing within identified GRSG habitat areas in Nevada.

C. Identify applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

List by name and date all applicable NEPA documents that cover the proposed action.

Clayton Valley Geothermal Exploration Project Environmental Assessment (DOI-BLM-NV-B020-2011-0026-EA), April 8, 2011.

Alum Geothermal Exploration Project, Mineral Materials Contracts, Water Well and Pipeline Right-of-way and Access Road Right-of-Way Environmental Assessment (DOI-BLM-NV-B020-2009-0016-EA), May 22, 2009.

Programmatic Geothermal Environmental Assessment for the Tonopah Planning Area (NV-065-2001-0081), signed January 27 2002.

List by name and date other documentation relevant to the proposed action (e.g., biological assessment, biological opinion, watershed assessment, allotment evaluation, and monitoring report).

The Geothermal Leasing Act of December 24, 1970 as amended through P.L. 109–58, enacted August 8, 2005, authorized and established the procedures for the leasing of geothermal resources and associated byproducts on public lands through competitive and non-competitive leasing systems.

D. NEPA Adequacy Criteria

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?

Yes. The proposed geothermal lease parcels are included in the acreage previously analyzed in the Clayton Valley and Alum Exploration EAs and designated as open for fluid minerals leasing (subject to restrictions in some areas) in the Tonopah RMP and the Geothermal ROD. Applications for exploration and/or development at specific sites would be subject to further project-specific, site-specific environmental analysis before ground-disturbing actions would be approved, as stated in the Geothermal ROD (Chapter 1.9.3, page 1-17).

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values?

Yes. Environmental concerns, interests, and resource values have changed little since the Clayton Valley and Alum Exploration EAs and the Geothermal PEIS/ROD (2008) and GRSG Plan Amendment (2015) were signed. The environmental constraints for fluid minerals leasing, the acres and areas available or closed to mineral leasing have not changed since the Geothermal PEIS/ROD was finalized; and GRSG concerns, interests, values and conservation strategies have not changed since the GRSG Plan Amendment was finalized in 2015. In addition, all construction, operation, and maintenance activities associated with geothermal development must comply with all applicable federal, state, and local laws and regulations.

3. Is the existing analysis valid in light of any new information or circumstances (such as rangeland health standard assessment, recent endangered species listings, updated lists of BLM-sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?

Yes. There is no new information or circumstance that would substantially change the analysis in the Clayton Valley and Alum Exploration EAs, or the Tonopah RMP and Geothermal PEIS/ROD analyses of areas open to geothermal lease sale. Geothermal stipulations are applied according to the status and condition of any given parcel at the time of lease sale, as identified and recommended by resource specialists familiar with the parcel and resources. Further, both NEPA and the Geothermal PEIS/ROD prescribes subsequent site-specific environmental review of any future project proposed on a parcel (Chapter 1.9.3, page 1-17), which would encompass any new information or circumstances at that time. "Following lease issuance, when an application to conduct activities involving surface disturbance is submitted that could affect a listed species or critical habitat at a particular location within one of these areas, it would be subject to full policy and legal review at the time it is filed. This includes review and coordination under

the ESA and other applicable statutes of the applicability of the stipulations, best management practices, and procedures for the protection of other resources" (ROD page. 1-22). Similarly, the GRSG Plan Amendment establishes geothermal lease stipulations according to GRSG habitat type, along with habitat maps, and protocols for identifying habitat delineations. None of the nominated parcels in the Battle Mountain District lie within any identified GRSG habitat.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

Yes. Geothermal leasing creates no direct impact to the environment. The lease confers upon the holder the right to use as much of the land as is necessary to explore for, drill for, mine, extract, remove and dispose of all the geothermal resources in a leasehold, subject to stipulations, restrictions, and reasonable measures to minimize adverse impacts to other resources. The right to use the land for these purposes does not authorize the leaseholder to create any surface disturbance or cause any impact to the environment. Reasonably foreseeable future indirect impacts from leasing include the potential for exploration and development similar to that analyzed in the Clayton Valley and Alum Exploration EAs. When and if future exploration and/or development proposals are submitted, they will be analyzed for direct, indirect and cumulative effects in an additional project and site-specific NEPA document. Any issued geothermal leases on BLM-administered public land will be subject to the applicable stipulations and best management practices (BMPS) established by the Geothermal PEIS/ROD.

5. Are the direct and indirect impacts of the current proposed action substantially unchanged from those identified in the existing NEPA document(s)? Does the existing NEPA document sufficiently analyze site-specific impacts related to the current proposed action?

Yes. The proposed action does not authorize any surface or subsurface use or disturbance; therefore, there are no direct impacts from this action. Reasonably foreseeable future indirect impacts from leasing include the potential for exploration and development similar to that analyzed in the Clayton Valley and Alum Exploration EAs. When and if ground disturbing activities are proposed, they will be subject to further site-specific analysis. See items 1, 3 and 4 above.

6. Can you conclude without additional analysis or information that the cumulative impacts that would result from implementation of the current proposed action are substantially unchanged from those analyzed in the existing NEPA document(s)?

Yes. The proposed action does not authorize any surface or subsurface use or disturbance; therefore, there will be no cumulative impact with this action. When and if ground disturbing activities are proposed, they will be subject to further site-specific analysis. See items 1, 3 and 4 above.

7. Are the public involvement and interagency review associated with existing NEPA document(s) adequately for the current proposed action?

Yes. The Clayton Valley and Alum Exploration EAs included interagency and tribal coordination and public comment periods, as documented in the EAs. The Tonopah RMP, Geothermal PEIS and GRSG Plan Amendment processes all included extensive public involvement as documented in pages 39-42 of the Tonopah RMP, Chapter 1.13 of the Geothermal ROD, and Chapter 3 of the GRSG Plan Amendment. The Geothermal ROD was prepared jointly by the BLM and U.S. Forest Service, in close coordination with several other federal agencies as documented in Chapter 1.10.2. The BLM also collaborated with numerous agencies in preparing the GRSG Plan Amendment, as described in Chapter 3.1.

E. Persons/Agencies/BLM Staff Consulted

Name

Title

Greg Bjornstorm

Wildlife Biologist

Jonah Blustain

Cultural Resources Specialist

Wendy Seley

Realty Specialist

Daltrey Balmer

Rangeland Management Specialist

Elizabeth Freniere

Wild Horse and Burro Specialist

Melissa Jennings

Geologist

Juan Martinez

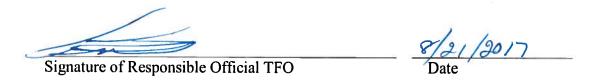
Native America Coordinator

Conclusion

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan as amended, and that the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of the NEPA.

Signature of Project Lead

Signature of NEPA Coordinator

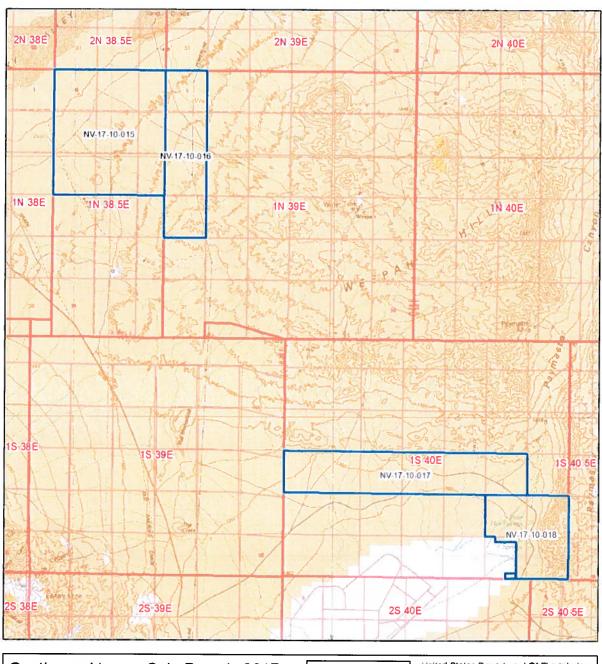


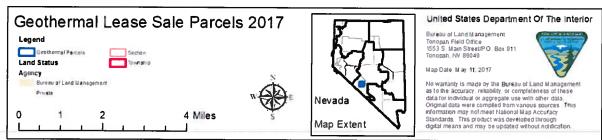
Note: The signed <u>Conclusion</u> on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.

Attachment A

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NV-17-10-015
                5078.000 Acres
 T.0010N, R.0382E, 21 MDM, NV
  Sec. 004 ALL;
      005 ALL;
      006 ALL;
      007 ALL;
      008 ALL;
      009 ALL;
      016 ALL;
      017 ALL;
      018 ALL;
Esmeralda County
Battle Mountain DO
PENDING NOMINATION NVN094119
EXISTING WATER WELL
Formerly Lease No.
NV-17-10-016
                2548.000 Acres
 T.0010N, R.0390E, 21 MDM, NV
  Sec. 006 PROT ALL;
      007 PROT ALL;
      018 PROT ALL;
      019 PROT ALL;
Esmeralda County
Battle Mountain DO
PENDING NOMINATION NVN094120
Formerly Lease No.
NV-17-10-017
                3738.180 Acres
 T.0010S, R.0400E, 21 MDM, NV
  Sec. 019 LOTS 25-48;
    019 E2;
    020 ALL;
    021 ALL;
    022 ALL;
    023 ALL;
Esmeralda County
Battle Mountain DO
PENDING NOMINATION NVN093688
Formerly Lease No.
NV-17-10-018
               2140.000 Acres
 T.0010S, R.0400E, 21 MDM, NV
  Sec. 025 ALL;
     026 ALL;
     035 E2E2,N2NWNE,N2NENW;
     035 S2SWSE;
     036 ALL;
Esmeralda County
Battle Mountain DO
PENDING NOMINATION NVN093690
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Map





Attachment B

Stipulations

Lease Notice - Cultural Resources and Tribal Consultation (#NV-B-07-A-LN)

This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, Executive Order 13007, or other statutes and executive orders. The BLM will not approve any ground-disturbing activities that may affect any such properties or resources until it completes its obligations (e.g., State Historic Preservation Officer (SHPO) and tribal consultation) under applicable requirements of the NHPA and other authorities. The BLM may require modification to exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized, or mitigated.

Parcel #

Legal Land Description

NV-17-10-015 THRU NV-17-10-018

ALL LANDS

Playas (#NV-B-10-D-NSO)

Stipulation: No Surface Occupancy (NSO) on playas. Playas are defined as the ephemeral round depressions within areas of dry lake beds in which water collects after a rain event and evaporates relatively quickly.

Objective [Purpose]: Protection of playas.

Exception: The Authorized Officer may grant an exception if an environmental review determines that the action, as proposed or otherwise restricted, does not affect the resource. An exception may also be granted if the proponent, BLM, and other affected interests (e.g. NDOW) negotiate mitigation that would satisfactorily offset the anticipated negative impacts. An exception may be granted for actions designed to enhance the long-term utility or availability of the playa resource.

Modification: The Authorized Officer may modify the size and shape of the restricted area if an environmental analysis indicates the actual suitability of the land for the resource differs from that in the otherwise applicable restriction.

Waiver: The restriction may be waived if it is determined that the described lands do not contain the subject resource, or are incapable of serving the requirements of the resource and therefore no longer warrant consideration as a component necessary for protection of the resource.

Parcel

Legal Land Description

NV-17-10-017

T.0010S, R.0400E, 21 MDM, NV

Sec. 021 S2SE;

022 S2SW,NESW,SE;

023 W2SW, SESW,;

NV-17-10-018

T.0010S, R.0400E, 21 MDM, NV Sec. 026 NW, SW, SE, SWNE;

035 E2NE, N2NWNE, N2NENW, SENE;

Soil Slopes > 30 and < 40 percent (#NV-B-11-A-CSU)

Stipulation: Controlled Surface Use (CSU) applies to lands with slopes greater than 30 percent and less than 41 percent. An engineering/reclamation plan must be submitted by the applicant and approved by the BLM Authorized Officer before any surface disturbance can occur.

The plan must demonstrate to the Authorized Officer's satisfaction how the operator will meet the following performance standards:

- Soil stability is maintained preventing slope failure and wind or water erosion.
- The site will be stable with no evidence of accelerated erosion features.
- The rate of soil erosion will be controlled to maintain or improve soil quality and sustainability. The disturbed soils shall have characteristics that approximate the reference site with regard to quantitative and qualitative soil erosion indicators described in H-7100-1 Soil Inventory, Monitoring, and Management Handbook.
- Sufficient topsoil is maintained for ensuring successful final reclamation. How interim reclamation will be completed for producing well locations and long-term roads, including the re-spreading of all salvaged topsoil over the areas of interim reclamation.
- The original landform and site productivity will be partially restored during interim reclamation and fully restored as a result of final reclamation.

Objective [Purpose]: To maintain soil productivity, provide necessary protection to prevent excessive soil erosion on steep slopes, to avoid areas subject to slope failure, mass wasting, piping, or having excessive reclamation problems, and to ensure successful interim and final reclamation.

Exception: An exception may be granted if the operator can demonstrate in a plan of operations that adverse effects can be minimized and activities safely conducted.

Modification: The area affected by this stipulation may be modified by the authorized officer if it is determined that portions of the area do not include slopes over 30 percent, or the operator can demonstrate in a plan of operations that adverse effects can be minimized. The authorized officer may modify the size and shape of the restricted area subject to the stipulation based upon a Natural Resource Conservation Service (NRCS) soil survey or BLM evaluation. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards.

Waiver: This stipulation can be waived by the authorized officer if is determined that none of the leasehold includes slopes over 30 percent.

Parcel #	Legal Land Description
NV-17-10-016	T.0010N, R.0390E, 21 MDM, NV Sec. 018 SWNE,NWSE,NESW; 019 NENE;
NV-17-10-017	T.0010S, R.0400E, 21 MDM, NV Sec. 019 LOTS 25-28:

Soil Slopes >40 percent (#NV-B-11-B-NSO)

Stipulation: No Surface Occupancy (NSO) on slopes greater than 40 percent.

Objective [Purpose]: To maintain soil productivity, provide necessary protection to prevent excessive soil erosion on steep slopes, to avoid areas subject to slope failure, mass wasting, piping, or having excessive reclamation problems.

Exception: The Authorized Officer may grant an exception if a staff review determines that the proposed action is of a scale (pipeline, vs. road, vs. well pad) or sited in a location or a site specific evaluation determines that the slope would not result in mass slope failure or accelerated erosion and the operator would be able to meet BLM's reclamation standards.

Modification: The Authorized Officer may modify the area subject to the stipulation based upon a BLM evaluation of the area. The stipulation and performance standards identified above may also be modified based on negative or positive monitoring results from similar proposed actions on similar sites or increased national or state performance standards. Any modification authorized by this stipulation is subject to 43 C.F.R. 3101.1-4, including provisions requiring public review for issues of major public concern, or substantial modifications.

Waiver: The restriction may be waived if it is determined that the described lands do not include lands with slopes greater than 40 percent. This determination shall be based upon USGS mapping and a BLM evaluation of the area. Any waiver authorized by this stipulation is subject to 43 C.F.R. 3101.1-4, including provisions requiring public review for issues of major public concern, or substantial waivers.

Parcel

Legal Land Description

NV-17-10-017

T.0010S, R.0400E, 21 MDM, NV

Sec. 020 N2NE;

021 NW, N2NE;

022 NENE;

023 NW, N2NE;

NV-17-10-018

T.0010S, R.0400E, 21 MDM, NV

Sec. 025 E2,E2W2;

036 E2.E2W2:

Lease Notice – Existing Water Well (#NV-B-17-B-LN)

A water well is located on site and will be considered the liability of the purchasing agent for the lease. Water Rights would be required for the well before use. Well will be required to be Plugged and Abandoned using state and federal laws and regulations.

Parcel #

Legal Land Description

NV-17-10-015

T.0010N, R.0382E, 21 MDM, NV Sec. 007 NWNWSE;